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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
| 10/613,290 | 07/03/2003 | Philip H. Snyder | 6001-988 | 4009 |

7590

03/08/2005

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EXAMINER

GARTENBERG, EHUD

ART UNIT

PAPER NUMBER

3746

DATE MAILED: 03/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SN

| | | | |
|------------------------------|------------------------|---------------------|--|
| Office Action Summary | Application No. | Applicant(s) | |
| | 10/613,290 | SNYDER ET AL | |
| | Examiner | Art Unit | |
| | Ehud Gartenberg | 3746 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 10 February 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-33 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-33 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

Election/Restrictions

1. In his response filed 2/10/2005, Applicant elected for further prosecution the species of Figures 6, 7 and 8. According to Applicant, "claims 1-33 are believed readable on the elected species." The election was made with traverse. Applicant did not give any reasons for traversing the species election requirement.

2. Upon further inspection of the elected species, it was determined that this application contains claims directed to the following patentably distinct species of the claimed invention:

a) With respect to the apparatus specification and claims, on p. 25, ll. 1-2, the apparatus has bearing, however they are not illustrated in Figure 7, and the description is silent with regard to the type of bearings employed. Note that technically speaking, a bearing can be a distinct part in an assembly (such as ball bearing), but it can also be incorporated in a non-distinct manner into the design of the rotor (such as a hydrodynamic bearing), and conventionally such designs are called "bearing-less". Also note that radial bearings and electromagnetic bearings represent distinct technologies that are based on distinct physical principles.

b) With respect to the method specification and claims, the description mentions a "to-turbine outlet port" see element 223 in Fig. 7, however the turbine is not shown in said Figure 7, and from said figure it is readily apparent that the claimed method may be used with the disclosed apparatus in combination with a turbine to generate shaft work, or without a turbine in order to generate thrust.

The claims directed to the different species of the claimed apparatus are:

a1) Claims 1-11: "bearing-less" species; a2) Claims 26-29: active electromagnetic radial bearing species; and a3) Claims 31-33: radial bearing.

The claims directed to the different species of the claimed method are:

b1) Claims 12-19 for a method without using a turbine, e.g., for thrust generation; and b2) Claim 20-25 and 30 for a method using a turbine, e.g., for shaft power generation.

The species b2 further contain two subspecies: b21) Claims 20-25 wherein the fuel is combusted; b22) Claim 30 wherein the fuel is detonated. It is noted that in particular in method claims the step of combusting a fuel is distinct from the step of detonating a fuel, because in the former the combustion decreases the pressure in the system, and in the latter the detonation increases the pressure in the system.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species (one for apparatus (a1 or a2 or a3) AND one for method (b1 or b21 or b22) for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable. Currently, no claim is generic, as confirmed by the Applicant in his response to the election requirement filed 2/10/2005, page 4.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

3. Should any of the elected species and respective claims be determined to be allowable over the prior art, the un-elected species and their respective claims will be considered to be rejoined with the examined and allowed claims.

4. A telephone call was made to John Allie on 3/1/2005 at 12:55 pm EST to request an oral election to the above restriction requirement.

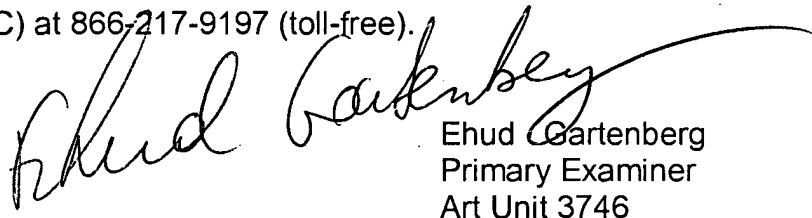
Applicant is advised that the reply to this requirement to be complete must include an election of the invention to be examined even though the requirement be traversed (37 CFR 1.143).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Ehud Gartenberg whose telephone number is 571 272 4828. The examiner can normally be reached on Monday-Thursday.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cheryl Tyler can be reached on 571 272 4834. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Ehud Gartenberg
Primary Examiner
Art Unit 3746

03012005